

Money Math: Lessons for Life

Correlations to Louisiana Mathematics Framework Standards

Content Strand: **NUMBER and NUMBER RELATIONS**

Lesson 1	The Secret to Becoming a Millionaire
Lesson 2	Wallpaper Woes
Lesson 3	Math and Taxes
Lesson 4	Spreading the Budget

The following **Benchmarks** are met by all four **Money Math** lessons.

All of the units met the guidelines for the following subset of the benchmarks for grades 5–8.
Foundation Skills addressed by each benchmark are identified by number and described below.

Number and Number Relations Benchmarks for Grades 5–8 Students in Grades 5–8 use estimation, mental arithmetic, number lines, graphs, appropriate models, manipulatives, calculators, and computers as they extend their investigations of problems involving rational numbers. As a result, what they know and are able to do includes:

- N-1-M** demonstrating that a rational number can be expressed in many forms, and selecting an appropriate form for a given situation (e.g., fractions, decimals, and percents);
Foundation Skills: 1—Communication, 2—Problem Solving, 4—Linking and Generating Knowledge
- N-3-M** reading, writing, representing, and using rational numbers in a variety of forms (e.g., integers, mixed numbers, and improper fractions);
Foundation Skills: 1—Communication
- N-4-M** demonstrating a conceptual understanding of the meaning of the basic arithmetic operations (add, subtract, multiply and divide) and their relationships to each other;
Foundation Skills: 1—Communication, 2—Problem Solving
- N-5-M** applying an understanding of rational numbers and arithmetic operations to real-life situations;
Foundation Skills: 1—Communication, 2—Problem Solving, 3—Resource Access and Utilization, 4—Linking and Generating Knowledge
- N-7-M** selecting and using appropriate computational methods and tools for given situations involving rational numbers (e.g., estimation, or exact computation using mental arithmetic, calculator, computer, or paper and pencil);
Foundation Skills: 2—Problem Solving, 3—Resource Access and Utilization, 4—Linking and Generating Knowledge
- N-8-M** demonstrating a conceptual understanding and applications of proportional reasoning (e.g., determining equivalent ratios, finding a missing term of a given proportion);
Foundation Skills: 2—Problem Solving, 4—Linking and Generating Knowledge
-

Content Strand: **ALGEBRA**

Lesson 1	The Secret to Becoming a Millionaire
-----------------	---

The following **Benchmarks** are met by **Money Math Lesson 1**.

Lesson 1 met the following sub-skills of the benchmarks for the Algebra Strand:

Algebra Benchmarks for Grades 5–8 Students in Grades 5–8 use manipulatives, models, graphs, tables, technology, number sense, and estimation as they extend their investigations of problems involving the concepts and application of algebra. As a result, what they know and are able to do includes:

- A-1-M** demonstrating a conceptual understanding of variables, expressions, equations(e.g., symbolically represent real-world problems as linear terms, or equations:
Foundation Skills: 1—Communication, 2—Problem Solving, 4—Linking and Generating Knowledge
- A-2-M** modeling and developing methods for solving equations (e.g., using charts, manipulatives, and/or standard algebraic procedures);
Foundation Skills: 2—Problem Solving, 3—Resource Access and Utilization, 4—Linking and Generating Knowledge
- A-5-M** demonstrating the connection of algebra to the other strands and to real-life situations;
Foundation Skills: 1—Communication, 2—Problem Solving, 3—Resource Access and Utilization, 4—Linking and Generating Knowledge, 5—Citizenship
-

Content Strand: MEASUREMENT

Lesson 2 Wallpaper Woes

The following Benchmarks are met by Money Math Lesson 2.

Lesson 2 met the following sub-skills of the benchmarks for the Algebra Strand:

Measurement Benchmarks for Grades 5–8 Students in Grades 5–8 use number sense, estimation, appropriate manipulatives, tools, and technology as they extend their investigations of problems involving measurement. As a result, what they know and are able to do includes:

- M-1-M** applying the concepts of length, area, surface area, money, and time, to real-world experiences;
Foundation Skills: 2—Problem Solving, 3—Resource Access and Utilization, 4—Linking and Generating Knowledge
- M-2-M** demonstrating an intuitive sense of measurement (e.g., estimating and determining reasonableness of measures);
Foundation Skills: 1—Communication, 2—Problem Solving, 4—Linking and Generating Knowledge
- M-3-M** selecting appropriate units and tools for tasks by considering the purpose for the measurement and the precision required for the task (e.g., length of a room in feet rather than inches);
Foundation Skills: 2—Problem Solving, 3—Resource Access and Utilization, 4—Linking and Generating Knowledge
- M-6-M** demonstrating the connection of measurement to the other strands and to real-life situations;
Foundation Skills: 1—Communication, 2—Problem Solving, 3—Resource Access and Utilization, 4—Linking and Generating Knowledge, 5—Citizenship

Correlations prepared by **Yvelyne Germain-McCarthy, Ph.D.**, Mathematics Specialist, College of Education, University of New Orleans.

Louisiana Content Standards Foundation Skills

The Louisiana Content Standards Task Force has developed the following foundation skills which should apply to all students in all disciplines.

- 1. Communication:** A process by which information is exchanged and a concept of "meaning" is being created and shared between individuals through a common system of symbols, signs, or behavior. Students should be able to communicate clearly, fluently, strategically, technologically, critically, and creatively in society and in a variety of workplaces. This process can best be accomplished through use of the following skills: reading, writing, speaking, listening, viewing, and visually representing.
- 2. Problem Solving:** The identification of an obstacle or challenge and the application of knowledge and thinking processes, which include reasoning, decision making, and inquiry in order to reach a solution using multiple pathways, even when no routine path is apparent.
- 3. Resource Access and Utilization:** The process of identifying, locating, selecting, and using resource tools to help in analyzing, synthesizing, and communicating information. The identification and employment of appropriate tools, techniques, and technologies are essential to all learning processes. These resource tools include pen, pencil, and paper; audio/video material, word processors, computers, interactive devices, telecommunication, and other emerging technologies.
- 4. Linking and Generating Knowledge:** The effective use of cognitive processes to generate and link knowledge across the disciplines and in a variety of contexts. In order to engage in the principles of continual improvement, students must be able to transfer and elaborate on these processes. "Transfer" refers to the ability to apply a strategy or content knowledge effectively in a setting or context other than that in which it was originally learned. "Elaboration" refers to monitoring, adjusting, and expanding strategies into other contexts.
- 5. Citizenship:** The application of the understanding of the ideals, rights, and responsibilities of active participation in a democratic republic that includes working respectfully and productively together for the benefit of the individual and the community; being accountable for one's choices and actions and understanding their impact on oneself and others; knowing one's civil, constitutional, and statutory rights; and mentoring others to become productive citizens and lifelong learners.

Note: These foundation skills are listed numerically in parentheses after each benchmark.

"The activities are engaging and based on the reform movement in mathematics. I especially liked the problem-solving career cases presented."

-- Yvelyne Germain-McCarthy, Ph.D., Mathematics Specialist, College of Education,
University of New Orleans
